Internalized Stigma and its Association with Hope, Self-Esteem, Self-Efficacy, and Treatment Adherence among Outpatients with Severe Mental Illness: A Cross-Sectional Survey

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Abstract

Background: This study investigated the association between internalized stigma and hope, self-esteem, self-efficacy, and treatment adherence and explored the most influential and predictive factor of internalized stigma among patients with severe mental disorders. **Materials and Methods:** This correlational descriptive study was conducted on 257 outpatients diagnosed with severe mental illness according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) diagnostic criteria. The participants were seeking treatment at outpatient and affiliated clinics of Razi Hospital, Iran, from October 2018 to May 2019. We used a convenient sampling design. Internalized Stigma of Mental Illness scale, Dispositional Hope Scale, Rosenberg's Self-Esteem Scale, General Self-Efficacy Scale, and Drug Attitude Inventory were used to gather data. The data were analyzed using inferential statistics (Pearson correlation, coefficient logistic, and regression analyses) at a 0.05 significance level. **Results:** The mean (standard deviation) score of internalized stigma was 1.57 (0.49), and 58% of the participants reported moderate to high internalized stigma. A negative significant relationship was found between internalized stigma and hope ($r = -0.55$, $p < 0.05$), self-esteem ($r = -0.66$, $p < 0.05$), and self-efficacy ($r = -0.64$, $p < 0.05$). Treatment adherence was not found to be significantly associated with the internalized stigma. In the final regression model, self-esteem and self-efficacy significantly predicted internalized stigma. **Conclusions:** Given the crucial role of self-esteem and self-efficacy in predicting internalized stigma, nurses should devote special attention to these factors and use strategies to improve individuals' self-esteem and self-efficacy.

Keywords: *Hope, mental disorders, self-concept, self-efficacy, social stigma, treatment adherence and compliance*

Introduction

Severe Mental Illness (SMI) includes schizophrenia, bipolar disorder, and major depressive disorders.[1] These disorders are debilitating and include psychotic disorder with a nonorganic cause, illness, treatments for more than two years, and disability in social and occupational functions.[2] About 5.6% of the US population suffers from SMI.[3] In Iran, 1% of people with mental disorders have a severe form of the disease.[4] Psychiatric diagnoses disappoint patients and their families and lead to discrimination and prejudgment against these individuals.[5]

Quoting Goffman, Harris states stigma is conceptualized to be an intensely discrediting characteristic that turns the carrier from a normal individual to an unstable and corrupt person.[6] Stigma encompasses three interacting levels, namely, individual, social, and structural. Structural stigma refers to the rules, policies, and procedures set by powerful private and public entities that restrict the rights and opportunities for people with a mental illness. Public stigma describes large social groups that endorse stereotypes and act against a stigmatized group.[7] In Internalized or self-stigma, a person with mental illness is aware of negative labels, agrees with them, and adopts the public's stigmatizing attitudes.[8] Internalized stigma represents a transformative process whereby a person loses previously held or hoped-for identities and adapts a worthless view of themselves. The effects and consequences of stigma include mood instability, increased

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Access this article online

Website: https://journals.lww.com/jnmr

DOI: 10.4103/ijnmr.ijnmr_248_21

Quick Response Code:

hospitalizations, poor life quality, low life satisfaction,[9] employment and housing difficulties, higher education and insurance problems, less access to the judicial system,[10] poor treatment adherence,[11] embarrassment and isolation, violence, and suicidal ideation,[12,13] increased symptom severity, and depression symptoms.[14] These effects are observed universally and are more common in developing countries with more negative attitudes toward mental illness and lower budget allocations to psychiatric services.[9] Iran, as a developing country, is not an exception.

Antistigma programs need to be implemented to reduce the effects of stigma. To design these interventions, it is necessary to identify the factors associated with stigma. Studies show a negative relationship between internalized stigma and self-esteem, self-efficacy, and hope.[11,14-20] In most studies, low levels of self-esteem, self-efficiency, and hope are considered a consequence of internalized stigma. However, the connection between stigma and these concepts seems to be complicated. Stigmatized identities need self-esteem and self-efficacy to maintain a positive sense of self.[19] Self-esteem refers to the degree of respect or values people place on themselves and their abilities and judgments.[21] On the other hand, self-efficacy is a person's mental perception of his ability to function in a certain environment or achieve desired results.[22] Stigmatized people may not be affected by negative evaluations of others. Self-efficacy may play a role in correcting the adverse effects of stigmatization.[19] These concepts may protect against negative perceptions, feelings, and inappropriate behavioral responses, contributing to mental health and positive social behavior. However, some studies have implemented interventions on self-esteem and hope to reduce stigma.[23,24] However, few studies have considered self-esteem, self-efficacy, and hope as predictors of self-stigma.[14,19] Moreover, some studies did not include people with SMI.[19] Previous research showed that internalized stigma is associated with a lower degree of hope,[11,20] though some studies do not confirm this relationship.[14] Therefore, this study aimed to determine the relationship between internalized stigma and self-esteem, hope, self-efficacy, and treatment adherence. We also identified the most influential and predictive factors of stigma in outpatients who had schizophrenia, major depressive disorder, and bipolar disorder and were seeking treatment.

Materials and Methods

This correlational descriptive study selected adult patients with SMIs (including schizophrenia, major depression, and bipolar disorder) who were seeking treatment at outpatient and affiliated clinics of Razi Hospital, Iran, from October 2018 to May 2019. This center is the largest psychiatric care hospital in northwestern Iran and the prestigious center of Tabriz University of Medical Sciences. Our inclusion criteria included Iranian citizenship, age ranges of

18–60 years, and literacy in the Persian language. Included participants also suffered from SMIs (schizophrenia, major depression, and bipolar disorder) as determined by a psychiatrist using DSM-V criteria. They were diagnosed more than one year, knowledgeable about their disease, and willing to complete the questionnaire. Finally, they did not have intellectual disabilities, acute hallucinations, delusions, substance abuse, or personality disorders (as approved by the psychiatrist). Given these criteria, our participants were able to answer the questionnaires. The main researcher completed all questionnaires due to the illiteracy of some participants to obtain reliable data. All the questions were read to the participants to ensure understanding without bias. Interviews were carried out in a private, separated room at the clinic.

The questionnaires included five scales: the Internalized Stigma of Mental Illness, Dispositional Hope Scale (DHS), Rosenberg's Self-Esteem Scale, General Self-Efficacy Scale, and Drug Attitude Inventory (DAI). Due to a lack of access to the Persian scales, all scales were translated into Persian and back-translated into English by psychologists and psychiatrists with good English knowledge. A pilot study was conducted on 30 individuals to determine the feasibility and reliability of the Persian version of each scale and calculate the sample size. Ten faculty members of Medical Sciences of Tabriz assessed the content and face validity of the scales, and their comments were used to modify each item. Considering a standard deviation of 13.2, a confidence interval of 95%, $d = 0.13SD$, and a 10% dropout, we selected 257 people as our sample. The Internalized Stigma of Mental Illness (ISMI) scale was used to measure internalized stigma and included five subscales: alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance. ISMI was designed by Ritsher *et al*.[25] in 2003. ISMI uses a four-point Likert scale ranging from strongly disagree to strongly agree to measure 29 items. The ISMI mean scores (1 to 4) and the cut-off point were 2.5. Scores below 2.5 were considered low internalized stigma, while scores of 2.5 and above indicated moderate to high internalized stigma.[14,26] The internal consistency in the pilot test (Cronbach's alpha) was 0.94. In this study, similar to previous studies, stigma resistance subscales were not included in the ISMI total score due to low internal consistency and weak correlation with other subscales.[14,27] DHS, developed by Snyder *et al*.[28] in 1991, is one of the most widely used scales to measure hope in mental health. The scale includes a 12- item scale with 8-point Likert from definitely false (1) to true (8). The agency subscale consists of four questions that measure the person's sense of achievement in general goals. The four pathway items refer to the person's cognitive appraisals of the ability to find solutions and achieve goals. There are four filler questions to increase test accuracy, which are excluded from the scoring. Total scores ranged from 8 to 64. Higher scores

indicate an increased sense of hope. The Cronbach's alpha was 0.78 in our sample. The Rosenberg Self-esteem Scale, developed by Rosenberg in 1965, is a 10-item scale that is used to measure life satisfaction and feelings of self-worth. The items are answered on a four-point scale ranging from strongly agree[4] to strongly disagree.[1] The total score of the questionnaire varies from 10 to 40.[29] Higher scores indicate higher self-esteem. The Cronbach's alpha in our sample was 0.88. The Sherer General Self-efficacy Scale measures three aspects of behavior, including initiative behavior, task completion, and adversity persistence, and was used to assess patients' self-efficacy. This scale was developed by Sherer *et al.* in 1982 and had a Likert 17-item format. The response format is a five-point scale. The sum of item scores reflects general self-efficacy. A high total score shows the high efficacy of respondents.[30] The Cronbach's alpha in our sample was 0.83. DAI, developed by Hogan *et al.* in 1983, is a scale containing ten questions and is used to assess attitudes toward drugs, especially psychotropic drugs. Each response for adherence receives a +1 score, and responses for nonadherence receive −1. The scores range from −10 to +10.[31] The Cronbach's alpha in our sample was 0.71. Demographic data were collected for all respondents, including age, gender, employment status, total monthly income, educational level, and marital status. Medical records were also reviewed to confirm the disease's diagnosis, duration, and hospitalization number.

At first, the normal distribution of internalized stigma variable was evaluated using the Kolmogorov–Smirnov test. The data were analyzed using descriptive (mean and standard deviation, frequency, and frequency percentage) and inferential statistics (Pearson correlation coefficient logistic regression analyses) at the significance level of 0.05 in SPSS software (version 13, SPSS Inc., Chicago, IL, USA). Self-esteem, hope, self-efficacy, and treatment adherence were analyzed as predictors of internalized stigma.

Ethical considerations

After obtaining permission from the hospital head, the first researcher met and selected patients according to the inclusion criteria. The participants were provided with complete explanations of the study and procedures. We ensured patients that their information would be kept anonymous and that they could end the interview at any time. Written and oral informed consents were obtained from all participants. The study was approved by the Research Ethics Committee of Tabriz University of Medical Sciences (IR.TBZMED.REC.1396.674).

Results

In this study, 257 patients completed the questionnaires. The mean (SD) age of the respondents was 36.80 (29.90) years, the mean number of hospitalizations was 2.73 (4.19), and the mean diagnosis duration was 8.65 (7.77). Other

sociodemographic characteristics of the participants are presented in Table 1.

The mean internalized stigma was 2.51 (0.55). Overall, 58% of the participants reported moderate to high internalized stigma. The highest score was in the "stereotype endorsement." The bivariate analysis revealed that internalized stigma and its dimensions were significantly associated with self-esteem, hope, and self-efficacy. By contrast, treatment adherence was not found to be significantly associated with internalized stigma [Table 2]. We included 253 patients in the logistic regression analysis, and the entire model was statistically significant ($x^2 = 12.69$, df = 24, $p < 0.05$). This model explains 39.20–61.40% of the variance of stigma (medium to high or low). According to the results, 93% of people with low stigma were classified correctly, and 69.20% of the predictions for people with moderate to high stigma

Table 1: Sociodemographic characteristics of the participants

Variable	*n* (%)
Gender	
Male	146 (56.80)
Female	111 (43.20)
Education	
Illiterate	10 (3.90)
Elementary	48 (18.70)
Intermediate	66 (25.70)
High school	94 (36.60)
University	39 (15.20)
Marital status	
Married	148 (57.60)
Single	74 (28.80)
Divorced/widowed	35 (1360)
Diagnosis	
BMD*	111 (43.19)
Schizophrenia	57 (22.17)
MDD**	89 (34.63)
Income	
Inadequate	156 (60.70)
Adequate	81 (31.51)
more than	20 (7.78)
Job	
Employed	101 (39.30)
Student/Homemaker/Retired	109 (42.40)
Unemployed	47 (18.30)
Hospitalization	
Yes	180 (70)
No	77 (30)
Residence	
Urban	212 (82.50)
Rural	459 (17.50)
Language	
Turkish	247 (96.10)
Other	10 (3.90)

*Bipolar Mood Disorder. **Major Depression Disorder

Table 2: Associations between dimensions of internalized stigma and self-esteem, hope, self-efficacy, and adherence to treatment

Internalized Stigma of Mental Illness (ISMI)	Mean (SD)	Self-esteem (Pearson correlation)	Hope (Pearson correlation)	Self-efficacy (Pearson correlation)	Adherence to treatment (Pearson correlation)
		r	r	r	r
Alienation	2.51 (0.56)	−0.63*	−0.49*	−0.55*	−0.05
					p=0.38
Stereotype endorsement	2.61 (0.68)	−0.61*	−0.55*	−0.59*	0.07
					p=0.25
Discrimination experience	2.43 (0.61)	−0.55*	−0.41*	−0.49*	0.04
					p=0.49
Social withdrawal	2.49 (0.65)	−0.52*	−0.45*	−0.56*	0.06
					p=0.27
Total ISMI	2.51 (0.55)	−0.66*	−0.54*	−0.64*	0.03
					p=0.58

* $p<0.05$

were correct. Overall, 88.10% of the predictions were correct. The results showed that age, hospitalization history, self-esteem, and self-efficacy significantly predicted stigma. According to the impact direction, stigma decreased with an increased mean of self-efficacy and self-esteem. Moreover, stigma increased with an increase in age and hospitalization history [Table 3].

Discussion

This study observed moderate to high internalized stigma in more than half (58%) of our sample. In a recent multinational review of the ISMI scale, a quarter and a half of the participants experienced high levels of internalized stigma.[14] In studies in different countries, 22.50–52% of patients reported internalized stigma at a moderate to a high level.[32-35] In a study in Tehran, 40% of the participants had a stigma score higher than the mean score, which was considered significant.[36] In our study, the level of internalized stigma was high, possibly due to several factors. For instance, many aspects of stigma are influenced by culture. In developing Asian countries, there is a tendency to stigmatize and discriminate against people with mental illnesses. Iranian families also have close interpersonal relationships and are more collectivized and connected. In this type of culture, there is a substantial prejudice against people with mental illnesses.[17,37]

A negative significant relationship was found between ISMI and self-esteem, which aligns with previous results.[14-17] Self-esteem was also identified as one of the significant predictors of internalized stigma, which is consistent with the results of Picco *et al*.'s study.[14] As Yanos *et al*.[38] noted, internalized stigma reduces one's hope and self-esteem and slows recovery. It seems that social contact deterioration, inability to live independently, the need to be taken care of, and difficulty in finding and maintaining a job lead to hopelessness and reduce self-esteem.[15] On the other hand, some subscales such as alienation significantly negatively affect patients' self-esteem. In the present study,

the correlation between alienation and self-esteem was higher compared to other subscales, which agrees with the results of Mashiach–Eizenberg's.[39] Alienation is defined as imagining oneself as a worthless member in society on ISMI. This finding could be a possible explanation for lower levels of self-esteem compared to other psychological variables in these patients. However, most psychosocial variables conceptually are intersected and intertwined, and this finding should be interpreted with caution.

In this study, self-efficacy was a predictor of internalized stigma. The patients who consider themselves mentally ill cannot overcome the disease, and their self-efficacy decreases.[18] Society may label a group of people, and the extent to which this label is internalized can vary across individuals. In simpler terms, the label imposed by society may not affect how one perceives oneself. In this case, self-efficacy can act as a tool to establish and maintain control at an individual level. Hence, stigmatized people can maintain a positive sense of their abilities and act successfully in an environment with limited access to resources.[19] Therefore, clinical interventions should help patients overcome internalized stigma and enhance their self-efficacy.

In this study, internalized stigma decreased as the level of hope increased. According to the finding of international studies, patients who experience a high level of internalized stigma are more hopeless compared to others.[11,16,20] However, Picco *et al*.[14] reported no significant relationship between internalized stigma and hope. Differences in cultural and ethnic contexts across nations seem to pave the way for this diversity.

The association between treatment adherence and stigma in this study was not significant, which is inconsistent with previous research.[40-42] It is challenging to find a hypothesis for this relationship. In most previous studies, treatment adherence was significantly associated with stigma, and this contrast may be due to cultural and ethnic differences among the study contexts.

Table 3: Predictive factors of internalized stigma

Variables	Levels	B	S.E.	Wald*	df	*p*	Exp (B)
Age		0.09	0.04	5.21	1	0.02**	1.09
Gender	Male	1.26	1.23	1.04	1	0.30	3.53
	Female (indicator)	-	-	-	-	-	-
Marital status				1.13	2	0.56	
	Single	−0.80	0.89	0.80	1	0.36	0.44
	Married	−0.80	0.77	1.05	1	0.30	0.44
	Divorced (indicator)	-	-	-	-	-	-
Education				3.70	4	0.44	
	Illiterate	1.05	1.58	0.44	1	0.50	2.86
	Elementary	−0.78	1.12	0.48	1	0.48	0.45
	Intermediate	−0.20	1.13	0.03	1	0.85	0.81
	High School	0.66	1.07	0.38	1	0.53	1.94
	University (indicator)	-	-	-	-	-	-
Diagnosis				0.45	2	0.79	
	BMD***	0.11	0.75	0.02	1	0.88	1.11
	Schizophrenia	−0.35	0.89	0.16	1	0.68	0.69
	MDD**** (indicator)	-	-	-	-	-	-
Duration of diagnosis		0.05	0.04	1.47	1	0.22	1.05
Economic status				4.97	2	0.08	
	Inadequate	0.37	1.15	0.10	1	0.74	1.45
	Adequate	−1.09	1.20	0.83	1	0.36	0.33
	More than (indicator)	-	-	-	-	-	-
Job				2.21	2	0.33	
	Employed	−0.26	0.62	0.18	1	0.66	0.76
	Student/Homemaker/ Retired	1.54	1.25	1.51	1	0.21	4.69
	Unemployed (indicator)	-	-	-	-	-	-
History of hospitalization	Yes	3.02	0.98	9.39	1	0.002**	20.68
	No (indicator)	-	-	-	-	-	-
Number of hospitalization		−0.17	0.08	3.85	1	0.05	0.84
Residence	Urban	−0.95	0.63	2.29	1	0.13	0.38
	Rural (indicator)						
Self-esteem		−0.19	0.08	5.88	1	0.01**	0.82
Self-efficacy		−0.17	0.04	20.04	1	<0.01**	0.83
Hope		−0.003	0.03	0.005	1	0.94	0.99
DAI*****		−0.05	0.06	0.73	1	0.39	0.948
Constant		10.49	3.35	9.79	1	0.002**	3.60E4

*The Wald statistic in logistic regression is equivalent to the *t*-statistic in linear regression. **$p < 0.05$. ***Bipolar mood disorder. ****Major depression disorder. *****Drug attitude inventory

The limitations of this study are mainly related to its small sample size and cross-sectional design, which would restrict the generalization of the findings. In addition, the data was self-reported, and no other methods were used to validate the data. We also collected data from participants who received treatment the previous year, and the results may not be generalizable to all patients. Due to the low reliability of DAI and respective comprehension problems, appropriate scales should be used to measure this variable. Despite these limitations, our findings could contribute to a better understanding of internalized stigma theory. In addition, self-esteem and self-efficacy could help predict the level of internalized stigma in patients.

Conclusion

Given the key role of self-esteem and self-efficacy in predicting internalized stigma, nurses should reinforce these factors and activate strategies to defend or restore a person's self-esteem and self-efficacy. Finally, internalized stigma corresponds to accepting social beliefs, and proper actions should be taken to eliminate misbeliefs about mental illnesses in societies, primarily through social

media and networks. Due to the impact of nurses' stigma on patients' recovery, special attention should be devoted to nursing education and on-the-job training to hinder stigmatized attitudes toward people with mental illness. In addition, further research is needed to determine the association between internalized stigma and treatment adherence and recovery.

Conflicts of interest

Nothing to declare.

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